THE ANSWER IS BLOWING IN THE WIND...

By Arden Miller, CZM

Meteorologists—you know, the people you see on the news who tell you if it's going to rain and get very excited when a "big pressure system" is moving toward us—are paid to predict the weather. They base their predictions on what they understand to be going on in the skies and oceans of not just the United States, but the whole world. A storm in India, extra cold air in Chicago, Illinois, and high velocity winds in Africa can all have a potential affect on what happens in Massachusetts.

If this sounds like an interesting way to spend your time, or you like the idea of seeing patterns in how things around the world are interconnected, this exercise in charting hurricanes and tropical storms can be a useful way to see science at work.

To track the storms of 2002, all you'll need is a pen or pencil, the graph at right, and access to weather service bulletins (these are available on t.v. and radio news reports, or by checking on-line Internet sites such as www.noaa.gov/wx.html on a regular basis). So if you have these things and want to see how you measure up to the people who get paid to do this, here's what you do:

1) Whenever you hear about a hurricane, or a tropical storm that has the potential to become a hurricane, plot its position on the map. Just make sure to note the name, as sometimes more than one hurricane or tropical storm can be on the radar screen at a time.

2) Follow weather updates, via the radio, Internet, or t.v. daily.

3) As you hear about any movements, note them on the map. Also, if your news source of choice is getting excited about wind speeds or gusts, make a note of that, perhaps using an arrow and an exclamation point next to your plotted dot.

Now, here's the fun part: based on what you've heard, and what you can see on your chart, try to guess the path of the storm/hurricane. Bonus points if you can predict the time it will touch over a particular area. As you are doing this, think about what you know of weather factors: is it over the jet stream? Are there low or high-pressure systems from other areas that could interfere with its path?

And here's a potentially fun twist (no pun intended): get together with friends or classmates and each pick one, and only one, source to get your hurricane or storm information from and agree to how often you'll update your map (i.e. everyday at noon and 6 p.m.). When it's all over, compare your sources to see which news source was the most accurate. Based on what you find out, you may develop a greater understanding and appreciation of weather. Or at least an idea of why the weather people are not always 100 percent accurate. You may even discover that you have a hidden talent that could someday lead to career as a meteorologist!

HURRICANE TRACKING CHART

CHART COURTESY OF NOAA

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WHEN PLOTTING A STORM

Hurricane center positions are given by latitude and longitude. For example, if you hear: “The storm’s center is located near 41.5 degrees North and 63.0 degrees West…” on the chart, read North to 41.5 degrees and then West to 63.0 degrees as shown in the example shown above right.